

**REMARKS**

In the Office Action dated July 3, 2006,<sup>1</sup> the Examiner rejected claims 6 under 35 U.S.C. § 112, first paragraph; rejected claims 3, 6, 11, and 14 under 35 U.S.C. § 112, first paragraph; rejected claims 1, 2, 4, 7, 9, 10, 12, 13, 15, and 17 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,463,659 to Nealon et al. (“Nealon”) in view of U.S. Patent No. 6,680,923 to Leon (“Leon”), and further in view of a publication by Executive Council (“Executive Council”); rejected claims 3, 6, 11, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Nealon in view of Leon, and further in view of Executive Council and U.S. Patent No. 6,288,639 to Addy (“Addy”); and rejected claims 3, 6, 11, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Nealon in view of Leon, and further in view of Executive Council and U.S. Patent No. 6,148,205 to Cotton (“Cotton”).

Upon entry of this Amendment, claims 1-7, 9-15, and 17 will remain pending and under examination. Applicants amend claim 3 to correct a typographical error and therefore respectfully request that the Examiner withdraw the objection to claim 3. Applicants also amend claim 6 to correct a lack of antecedent basis for “the reception sensitivity.” Applicants therefore respectfully request that the Examiner reconsider and withdraw the rejection of claim 6 under 35 U.S.C. § 112, second paragraph.

Applicants respectfully traverse the Examiner’s rejection of claims 3, 6, 11, and 14 under 35 U.S.C. § 112, first paragraph. The Examiner asserts that claims 3, 6, 11, and 14 fail “to comply with the written description,” stating: “[t]he claim(s) contain[]

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<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” Office Action at page 3.

Claim 3 recites an authenticating method including:

preventing communication with an unintentional portable radio device by narrowing the coverage area of the two or more portable radio devices before mutual authentication initiates based on the proximity of the two or more portable radio devices,

wherein a transmission output of only a particular one of said portable radio devices is reduced to shorten a communication distance of said portable radio devices.

The Examiner asserts that these elements of claim 3 “appear[] to suggest a system in which when the two devices are brought together a first device must reduce only its reception sensitivity (and not its transmission output) and a second device must reduce only its transmission output (and not its reception sensitivity).” Office Action at page 3.

Applicants’ specification teaches: “the reception sensitivity of only one particular terminal may be reduced” in the first full paragraph on page 13, which supports narrowing a coverage area by reducing a reception sensitivity. Furthermore, Applicants’ specification teaches: “the transmission output of only one particular terminal may be reduced,” which supports narrowing a coverage area by reducing a transmission output. Moreover, Applicant’s specification at page 15 teaches: “mutual authentication may be performed between terminal devices which are equipped with both functions,” thus providing support for reducing a reception sensitivity and reducing a transmission output. For example, a first terminal device may include a radio output attenuator 140 (Fig. 1) and a second terminal device may include a reception sensitivity attenuator 150

(Fig. 6), allowing “mutual authentication [to be] performed between terminal devices which are equipped with both functions.” Applicants’ Specification at page 15.

Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 3, 6, 11, and 15 under 35 U.S.C. § 112, first paragraph.

Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1, 2, 4, 7, 9, 10, 12, 13, 15, and 17 under 35 U.S.C. § 103(a) as being unpatentable over Nealon in view of Leon, and further in view of Executive Council. A prima facie case of obviousness has not been established because, among other things, none of Nealon, Leon, and Executive Council, taken alone or in combination, teach or suggest each and every element of Applicants’ claims.

Claim 1, for example, recites an authenticating method including:

switching coverage area of two or more of said portable radio devices to be mutually authenticated from the first coverage area to the second coverage area, the second coverage area being smaller than the first coverage area;

bringing the two or more portable radio devices to be mutually authenticated having the second coverage area to within a proximity of one another so that the coverage areas of the two or more portable radio devices overlap;

initiating mutual authentication by establishing communication between the two or more portable radio devices based only on the bringing of the two or more portable radio devices to within the proximity

preventing communication with an unintentional portable radio device by narrowing the coverage area of the two or more portable radio devices before mutual authentication initiates based on the proximity of the two or more portable radio devices.

(emphasis added).

The Examiner asserts that Nealon teaches the claimed “switching coverage area of two or more of said portable radio devices to be mutually authenticated from the first coverage area to the second coverage area, the second coverage area being smaller

than the first coverage area" in col. 8:23-34. Even assuming that this assertion is true, Nealon only "switches" a coverage area after initiating registration. Nealon, col. 8:23-35. Therefore, as conceded by the Examiner, "Nealon does not teach initiating **mutual authentication** based only on the bringing of two devices to within a proximity." Office Action at 4 (emphasis in original). Similarly, contrary to the Examiner's assertion, Nealon does not teach or suggest "narrowing the coverage area of the two or more portable radio devices before mutual authentication initiates," as recited by claim 1.

Leon fails to cure the deficiencies of Nealon. The Examiner asserts: "Leon discloses the idea that when two devices are brought to within a predetermined vicinity, mutual authentication automatically executes." Office Action at 4.<sup>2</sup> Leon, however, operates only using a single coverage area—"a pre-established vicinity range." Leon, col. 5:58-61. In contrast, claim 1 recites "initiating mutual authentication by establishing communication between the two or more portable radio devices based only on the bringing of the two or more portable radio devices to within the proximity" (emphasis added). "The proximity," as recited by claim 1, refers to the proximity established using the second coverage area, wherein the coverage area has been switched "from the first coverage area to the second coverage area, the second coverage area being smaller than the first." Thus, even assuming Leon teaches initiating authentication when devices are within a predetermined vicinity, Leon fails to teach or suggest "initiating mutual authentication by establishing communication between the two or more portable radio devices based only on the bringing of the two or more portable radio devices to within the proximity." Similarly, Leon does not teach or suggest "narrowing the

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<sup>2</sup> The Examiner does not cite any portion of Leon that allegedly supports this assertion.

coverage area of the two or more portable radio devices before mutual authentication initiates."

Moreover, Leon discloses: "Two devices communicating within one another within the appropriate or pre-established vicinity range must contain or have recognition of the same unique identifier. This protocol allows each device to authenticate the other." Leon, col. 5:58-62. Such teaching of requiring a "unique identifier" to initiate authentication, as taught by Leon, does not constitute a teaching or suggestion of "initiating mutual authentication . . . based only on the bringing of the two or more portable radio devices to within the proximity," as recited by claim 1 (emphasis added).

Furthermore, the Examiner has failed to identify the requisite motivation to combine the references to arrive at Applicants' claim 1. Nealon teaches away from the claimed method by disclosing that a "user must press the # button on the handset" and that if the user fails to press the button, "the registration state will time out" (emphasis added, Nealon, col. 8:52-58). Requiring a user to press a button prior to entering a "registration state . . . [where] both the base unit and handset unit . . . operat[e] at a low power level below the normal operating power level," as taught by Nealon (col. 8:30-34), teaches away from switching coverage areas and "initiating mutual authentication . . . based only on the bringing of the two or more portable radio devices to within the proximity," as recited by claim 1 (emphasis added). Leon also teaches away from the claimed method because Leon teaches only a single "vicinity range." Leon, col. 5:60. Thus, one of ordinary skill in the art would not look to Nealon and Leon to arrive at the claimed invention.

The claimed invention satisfies both preventing the communication with unintentional devices and providing instant connectivity. Nealon and Leon, taken individually or in combination, fail to teach or suggest such a method.

Executive Council fails to cure the deficiencies of Nealon. Accordingly, because Nealon, Leon, and Executive Council fail to teach or suggest each and every element recited by claim 1, no *prima facie* case of obviousness has been established for this claim. Applicants therefore respectfully request that the Examiner withdraw the rejection of claim 1 under 35 U.S.C. § 103(a).

Independent claims 9 and 17, although of different scope, recite similar elements to independent claim 1. Claims 2, 4, 7, 10, 12, 13, and 15 depend from independent claims 1 and 9 and therefore include all of the elements recited therein. Accordingly, for at least the reasons discussed above with respect to claim 1, no *prima facie* case of obviousness has been established with respect to claims 2, 4, 7, 9, 10, 12, 13, 15, and 17.

Applicants respectfully traverse the Examiner's rejection of claims 3, 6, 11, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Nealon in view of Leon, and further in view of Executive Council and U.S. Patent No. 6,288,639 to Addy ("Addy"). Independent claims 3, 6, 11, and 14, although of different scope, recite elements similar to those recited by claim 1. Addy fails to cure the deficiencies of Nealon, Leon, and Executive Council discussed above. Accordingly, for at least the reasons discussed above with respect to claim 1, no *prima facie* case of obviousness has been established for claims 3, 6, 11, and 14. Applicants therefore respectfully request that the Examiner reconsider and withdraw the rejection of claims 3, 6, 11, and 14 under 35 U.S.C.

§ 103(a) as being unpatentable over Nealon in view of Leon, and further in view of Executive Summary and Addy.

Applicants respectfully traverse the Examiner's rejection of claims 3, 6, 11, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Nealon in view of Leon, and further in view of Executive Council and U.S. Patent No. 6,148,205 to Cotton ("Cotton"). Independent claims 3, 6, 11, and 14, although of different scope, recite elements similar to those recited by claim 1. Cotton fails to cure the deficiencies of Nealon, Leon, and Executive Council discussed above. Accordingly, for at least the reasons discussed above with respect to claim 1, no prima facie case of obviousness has been established for claims 3, 6, 11, and 14.

In view of the foregoing remarks, Applicants submit that this claimed invention is neither anticipated nor rendered obvious in view of the references cited against this application. Applicants therefore request the Examiner's reconsideration of the application and the timely allowance of the pending claims.

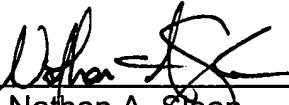
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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